ABSTRACT

An eye-tracking method includes the step of removably affixing a ring member to an eye in surrounding relation to a cornea of the eye. A plurality of incident light spots are transmitted onto the ring member, and reflections are detected from the ring member of the incident light spots. By analyzing the reflections, eye movement can be determined. A system for tracking eye movement includes a ring member and a device for removably affixing the ring member to an eye in surrounding relation to a cornea of the eye, such as, for example, by applying a vacuum to the ring. A light transmitter transmits a plurality of incident light spots onto the ring member, and a detector for detecting reflections from the ring member of the incident light spots. A processor and software installed thereon are adapted to perform calculations to determine eye movement from an analysis of the reflections.